

them midventral, the others laterodorsal. I do not know that this is respiratory in structure, but it suggests the folds of the *Æschnine* forms. I did not see any of these nymphs draw water into the anus, but I did notice that one lived nine days without external gills. In the nymph of *Calopteryx*, I found a similar ampulla, and stranger still, another one just like it, also in the rectum. The fatty bags seem to be projections into the lumen of the rectum, but do not hang free into it. They are covered by a tough chitinous epithelium.—STEPHEN G. RICH.

Rhynchophora in Maine.—While collecting in Cumberland Co., Maine, last summer, in the vicinity of Sebago Lake, I took the following weevils, which are not reported from that state in Blatchley and Leng's *Rhynchophora* of Northeastern America, viz.: *Apion puritanum* Fall, *Anthonomus hamamelidis* Pierce, *Balaninus obtusus* Blanchard.—ALAN S. NICOLAY.

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY.

MEETING OF MAY 16, 1916.

A regular meeting of the New York Entomological Society was held May 16th, 1916, at 8:15 P. M., in the American Museum of Natural History, President Harry G. Barber in the chair, with 14 members and one visitor present.

The curator reported a revision of the Membracidae of the Local Collection by Mr. Olsen.

Mr. Dow reported arrangements for Lahaway field trip, and the names of members who had indicated their intention of joining it for one or more days.

Mr. Davis called attention to the forest fires at Wading River, Long Island, often visited by our members, and spoke earnestly of the useless damage done to Long Island through such fires.

Mr. Leng exhibited a collection of the genus *Tetracha*, of which a great part was loaned by Mr. Harris, and called special attention to the recent increase in our knowledge thereof through the activity of Mr. Harris, Mr. Davis and the Museum expeditions of Dr. Lutz and Mr. Mutchler.

Mr. Davis commenting thereon spoke of the differences between *Tetracha carolina* var. *floridana* Mss. and allied forms and of comparisons he had made in Washington while visiting Dr. Schwarz.

Mr. Barber read a paper on Nabidæ, in which he reviewed the five genera and 22 species known from the United States, giving their distribution as follows:

**Carthasis rufo-notatus* Champ., Panama, D. C., Md., N. J. (*decorata* Uhler and *contrarius* Reuter being synonyms).

Metatropiphorus belfragei Reuter, Texas, Fla., N. C., D. C., N. Y., New Eng.

Phorticus collaris Stål, Texas, Mexico.

**Pagasa fusca* Stein (including *nitida* Stål as synonym). Eastern U. S., N. Y., N. J., Neb., Mo., Tex., Ariz.

P. pallipes Stål, western U. S.

**Nabis* (formerly known as *Reduviolus* Kirby) *subcoleopratus* Kirby, N. E. U. S. (extremely common in Adirondack Mts.).

**N. ferus* Linn., common to U. S. and Europe.

N. capsiformis Germar, common to So. U. S. and Europe and almost cosmopolitan in tropical and sub-trop. regions.

**N. inscriptus* Kirby, common to No. U. S. and Europe.

N. limbatus Dahlb., common to No. U. S. and Europe, also Colo.

N. flavomarginatus Scholtz, No. U. S. and Europe, also Colo.

**N. annulatus* Reuter, E. U. S.

**N. propinquus* Reuter, E. U. S. (*vicarius* Reut.).

**N. roseipennis* Reuter, E. U. S.

**N. rufusculus* Reuter, E. U. S. (*assimilis* Uhl.).

**N. sordidus* Reuter, E. U. S. (*pallescens* Reut.).

N. heidemanni Reut., Cal.

N. kalmiæ Reuter, Wis.

N. constrictus Champ. (A Mexican species, specimens from near Washington, D. C., have been determined as such by Mr. Reuter.)

N. nigriventris Stål, S. W. U. S. and Mexico (*sericans* Reut.).

N. crassipes Reut., S. W. U. S. and Mexico.

N. chenkeanus Kirkaldy, So. U. S.

The species marked with asterisk have been found within 50 miles of N. Y. City, though in single instances in some cases. The New Jersey List cites most of them, though some are under synonymous names. It also cites *sericans* Reut. (a synonym of *nigriventris*) and *kalmiæ* Reut., neither of which are likely to occur so far east; *kalmiæ* being very close to *ferus*, the New Jersey record may be based on that species.

Mr. Barber spoke also of the predaceous habits of the species, of their occurring in both brachypterous and macropterous forms, and of their taxonomic characters, praising in this connection the work of the late O. M. Reuter of Finland.

In the discussion that followed, Mr. Barber was urged to prepare a synoptic key for the JOURNAL.

Mr. Mutchler exhibited the enormous larva of an African Goliath beetle, Dr. Bequaert spoke of their being found in decayed wood and of their being

eaten by the natives, commenting on which Mr. Dow remarked that he had found the astringent taste of similar larvæ unpleasant.

Mr. Weiss exhibited the stages and work of the introduced boxwood leaf miner (*Monarthropalpus buxi* Lab.), now established at Rutherford, Eatontown, Far Hills, Gladstone and Peapack, in New Jersey.

Mr. Schaeffer recorded *Dermestes pulcher*, found at South Amboy, N. J., by Mr. Schott.

Mr. Davis exhibited Cicindelidæ obtained from Franklin Sherman, Jr., which will be recorded in Miscellaneous Notes, and a species of *Lyctus* found injuring shelves in the pantry of a house on Long Island.

MEETING OF OCTOBER 3, 1916.

A regular meeting of the New York Entomological Society was held Oct. 3, 1916, at 8:15 P. M., in the American Museum of Natural History; President Harry G. Barber in the chair, with 17 members and six visitors present.

The Curator announced the date for the first Saturday afternoon meeting, Oct. 28, and the subject, Bruchidæ.

Mr. Dow reported for the Lahaway Committee that the plantation formerly owned by the late J. Turner Brakeley had been bought by his onetime superintendent, Wm. H. Horner, and that visitors would be entertained by him at a rate of \$7.00 per week. The Decoration Day outing had been attended for from one to four days by Mr. and Mrs. Dow, Mr. and Mrs. Leng, Dr. Bequaert and Messrs. Davis, Schaeffer, Olsen and Engelhardt. The collecting had proven far ahead of that found at Lakehurst, and the Weekly Messenger had been printing an account of the place and its visitors ever since.

Mr. Leng added an appreciation of Mr. Dow's hard work in making the excursion successful.

The Secretary read a letter from Mr. Joutel, dated May 16, announcing the death on May 1 of Julius Meitzen, aged 80 years, a former member of the Society, and on motion a minute is hereby entered expressive of the sorrow of the Society.

Mr. Davis announced the death, on Sept. 6, of Louis H. Joutel, aged 58, an active member and former Treasurer and Secretary of the Society, reading an account of his life and entomological achievements, which will be printed in the JOURNAL. On motion, the Secretary was instructed to write Mr. Joutel's sister, conveying the sorrow and sympathy of the Society.

Mr. Sherman announced the death, on Sept. 29, of Christopher H. Roberts, aged 64, a former President of the Society, and briefly reviewed his long connection with this and the Brooklyn Entomological Society and his work with aquatic coleoptera. Mr. Sherman engaged to write an obituary notice for the JOURNAL and the Secretary was instructed to write Mrs. Roberts.

The President then called for brief outlines of the Summer collecting accomplished by the members.

Mr. Sherman said he had spent ten days tramping and collecting Cole-

optera in the White Mountains with Mrs. Sherman and Messrs. Dodge and Sheriff. He found the ponds too full for the best water beetle collecting but took an extraordinary number of *Carabus chamissonis* at Lake of the Clouds; and a specimen of *Cicindela longilabris* under a stone at over 5,000 ft. elevation. Mr. Sherman also exhibited the first description of Coleoptera in an American work, being the description of *Anisandrus pyri* by W. D. Peck, in an article entitled "On the Insects which Destroy the Young Branches of the Pear-tree and the Leading Shoots of the Weymouth Pine" in the Mass. Agl. Rep. and Journ. for Jan., 1817.

Mr. Olsen spoke briefly of his collections of Hemiptera in Massachusetts, Pennsylvania and Long Island, saying that he had not found insects numerous this year.

Mr. Dow said he had been on the go all summer, having made two trips to Claremont, N. H., two to Williamstown, Mass., and several to Lahaway; the specimens taken, of which he exhibited the first box, he placed entirely at the service of his friends, reserving only certain special desiderata for Messrs. Davis, Olsen and Bequaert.

Dr. Ottolengui, one of the charter members of the society, described his journey through Alberta, Vancouver, California and the Grand Canyon, his pleasant visits with Mr. Sanson at Banff and Van Duzee at San Francisco, and told of some of the rare *Plusia*, etc., he had secured, in part from Mr. Sanson. He dwelt especially on the abundance of *Pamphila* on a flowering hedge in Vancouver and again on blue aster-like flowers at Grand Canyon and on the number of Longhorn beetles found at dusk on the hotel wall in the Canadian Rockies.

Mr. Shoemaker spoke of his collecting experiences at Washington, D. C., in the Catskill Mts., and on Long Island, recording especially the capture of two butterflies, *Colias eurytheme* near east New York and *Apatura clyton*, found on silver poplar where beetles had caused the sap to flow, butterflies of southern distribution and rare on Long Island.

Dr. Lutz spoke of his journey with Mr. Rehn to Tucson and several of the mountain ranges of southern Arizona, leaving New York the latter part of June, and ending with a visit to Los Angeles and San Francisco, where he met Nunenmacher, Van Dyke, Van Duzee and other California entomologists at a meeting of the Pacific Entomological Society. He spoke especially of the excellent results of using a cheesecloth tent with lanterns inside for light collecting and of the insects collected at light in Texas while the train was detained in a swamp.

Mr. Engelhardt said his principal journey through southern California to Puget Sound was devoted mainly to marine invertebrates but with some entomological work included. Dr. Fenyes was visited in Pasadena, also Fordyce Grinnell, with whom he had a 30 mile walk through the Sierra Madre, and Dr. Van Dyke in San Francisco.

The ascent of Mt. Hood with blizzard weather alternating with a sun-

shine that brought out plenty of insects and a visit to Yosemite National Park were also features of his journey.

Mr. Harris described, as the principal result of several weeks in the White Mts., the location of *Cicindela ancocisconensis* on the watershed of the Israel River, a tributary of the Connecticut River, it having previously been known to occur in the White Mts. only in the Saco River valley, along the Glen Road near Ellis River, where his father found it in 1850. Mr. Harris exhibited also a box of *Cicindela limbalis* received from Col. Wirt Robinson, who had taken them at West Point, N. Y., and read a card from Dr. Walther Horn dated July 29, sending greetings to his American friends from the German field hospital on the Russian border.

Mr. Nicolay said his summer had been spent in Cumberland County, Maine, five miles from Sebago Lake; at Sudbury, Vermont, and at Lake Minnewaska, N. Y. In Maine the conditions proved similar to those found in northern New York, though the elevation was only 1,200 ft. Many good beetles were found, including *Anthophilax malachiticus* and *Pachyta rugipennis*, but black flies and mosquitoes were unpleasantly abundant.

Mr. Woodruff spoke of many short trips made to Litchfield, Conn., Yaphank, Rockaway, Lakehurst, sometimes with other collectors and particularly of the dragonfly results.

Mr. Davis in consideration of the late hour, spoke very briefly of his summer activity in North Carolina, Virginia, New Jersey and New York, but took pains to call attention to a specimen of *Papilio palamedes* found by Edward Burns, June 18, 1914, at Fort Wadsworth, Staten Island.

Mr. Dickerson said he had been in the field practically every day, engaged in nursery inspection work with Mr. Weiss, and would report later the more important results.

Mr. Leng exhibited European Rhynchophora found near Batavia, N. Y., while with Mr. Knight, Mr. Davis and Dr. Bradley in June; also an apparently new species of *Syncalypta* found at the same time.

Mr. Barber spoke enthusiastically of the collecting near Washington, D. C., and especially about the Great Falls.

Mr. Herbert Barber, upon the President's invitation, spoke also of the collecting about Washington and the species apparently brought there from considerable distances by the Potomac River; but said he was unable to devote much attention to it on account of the time required to find enough myriapods to feed the long-lived Lampyrid larvæ that were the special subject of his biological work, though rare species were occasionally thus found at night, as shown by a fine pair of *Cychnus ridingsii*. He said he now had the complete life history of one species of *Phengodes*, and partial histories of others.

Mr. Engelhardt proposed a trip to Yaphank for Sunday, Oct. 8, to show Mr. Barber that locality for *Phengodes*.

MEETING OF OCTOBER 17, 1916.

A regular meeting of the New York Entomological Society was held Oct. 17, 1916, at 8:15 P. M., in the American Museum of Natural History, President Harry G. Barber in the chair, with 20 members and five visitors, including Mr. W. S. Wright of San Diego, Cal., Dr. J. Bequaert and Mr. Edw. Burns, present.

Mr. Wunder exhibited the Society's album of photographs and Mr. Davis commented on the skill with which they had been mounted and labeled.

Mr. Dow spoke of the "Insects of Lahaway," reading extracts from the Allentown Messenger and exhibiting a box of specimens which he placed at the service of the members. In part he said that the collecting at Lahaway had been scarcely sampled, the more careful methods like sifting and sugaring having been greatly neglected; and in view of the great area of uncultivated land in that part of New Jersey, he felt that many interesting captures remained to be made.

Mr. Olsen exhibited the Hemiptera he had taken at Lahaway, representing 76 species and 53 genera, saying that they represented the usual run for the vicinity. He pointed out *Euschistus servus* and *Notonecta uhleri* as especially interesting captures.

Mr. Davis read an extract from his journal written after his return from the Decoration Day trip to Lahaway, in which the intermediate position of Lahaway between pure pine barren and better land to the west was indicated and its cranberry bogs and sandy patches were described, while its natural condition was reflected in the mention of deer, fox, coon, opossum, snakes and birds. The abundance of red cedar was stated to emphasize the difference between it and the white cedar swamps of Lakehurst; and the patches of lupine and *Cypridium acaule* were recalled in connection with the sports their long undisturbed growth had developed. Mr. Davis exhibited the rare *Hyla andersoni*, which was quite common, a chain snake 39 inches long, a worm snake $12\frac{1}{2}$ inches long (and exceeding the length stated in the books) as additional evidence of the almost virgin character of the great forests of Lahaway. He also showed many photographs taken during his visit, two maps of the region and a small part of the insects he had taken, pointing out especially an unusually dark specimen of *Cicindela rugifrons*, specimens of *Attelabus bipustulatus*, with oak leaf showing the half-moon shaped cut with which it commences to roll the leaf, *Mantispa interrupta*, collected by Mr. Dow in September and the following Orthoptera:

Gryllus assimilis Fabr.

Nomotettix cristatus cristatus Scudd.

Entettix carinatus Scudd. Previously reported by Dr. Fox from Camden and Cape May Counties, N. J., but not recorded from the State in the N. J. List of 1910.

Arphia sulphurea Fabr.

Chortophaga viridifasciata DeGeer.

Hippiscus phoenicopterus Germ. Nymphs.

Atlanticus sp. Nymph.

Mr. Leng showed some of the beetles he had caught, calling attention especially to the Rhynchophora found on the pines, beach plums and huckleberries, among which were *Anisandrus pyri*, one of the first beetles described by an American author, and *Rhinomacer pallipennis*, one of the new species recently described by W. S. Blatchley.

Dr. Bequaert said he had taken a great quantity of Hymenoptera and Diptera, but unfortunately his unfamiliarity with the American species prevented a complete report. However, he could say that *Methoca bicolor*, of which the life history appeared in the August number of *Psyche*, was one interesting capture because as a parasite on *Cicindela* larvæ, it was always found in sandy places. *Melitara prodenialis*, raised by Mr. Olsen from larvæ found in *Opuntia* leaves was especially interesting among the Diptera.

Dr. Forbes said that in looking over the Geometers found by Mr. Davis he noticed an aberration of *Apacasia deductaria* Walker that was remarkable for its suffused color.

Mr. Weiss exhibited the following insects of tropical American origin found in greenhouses in New Jersey:

Cholus cattleyæ Champion, and *Diorymellus lavimargo* Champion, new weevils recently described.

Diprion simile Hartig, a European sawfly found at Rutherford, South Orange and Elizabeth, N. J.

Tenthecoris bicolor Scott, found in Bergen Co., N. J.

Mr. Nicolay exhibited the green species of *Anthophilax* including the types of *hoffmani*, loaned by American Museum of Natural History; *viridis*, loaned by Mr. Shoemaker, and *malachiticus*, taken by himself in Cumberland Co., Maine, commenting on the constant difference between the two latter in the color of the legs.

Mr. W. S. Wright, upon invitation from the chair, spoke of the unusual character of California collecting, where four faunal zones could be found by going 60 miles from the coast, and where at times extraordinary numbers of specimens could be obtained. As instances he mentioned the late L. E. Ricksecker taking 1,700 moths in one night in September, 1911, in a trap, and his own experience in taking 500 day fliers in a three-days' trip in the mountains. Mr. Wright spoke also of the excellent collecting about San Diego and said he would always be glad to show visitors where the good places were.

Dr. Forbes spoke of *Pieris oleracea* as abundant in certain places in McLean bogs near Ithaca, N. Y., where it was evidently able to hold its own against *P. rapæ*.

Mr. Angell spoke of *Gymnetis sallei* and said the form occurring north of Mexico differed sufficiently to require a new name.

Mr. Davis showed a proof of photograph of the late Louis H. Joutel, prepared under Mr. Comstock's direction, and to appear in the *JOURNAL*. He spoke also of Mr. Sleight's illness and urged his friends to call on him at his residence, 95 Hamilton Ave., Paterson, N. J.

Mr. DeVyver spoke of the excellent conditions for collecting in the Interstate Park, describing the 28 days he spent there, during the early summer, about $3\frac{1}{2}$ miles back in the woods from Tompkin's Cove, N. Y., of which most were rainy.

Mr. Beyer, upon special invitation by the President, regretted that his years prevented activity in the field; but in allusion to Mr. DeVyver's comments on the extreme rains of the early summer, recalled his contrary experiences in Lower California, when for six months no rain whatever fell.

Mr. Dow said that Mr. Grossbeck and he found no scarcity of rain in the Blue Mountains of Jamaica, where it actually rained every day, and the choice lay between roasting in a rain coat or getting a daily wetting. The reports of the local weather bureau show that such daily rains have continued for at least 15 years.